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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,682	11/27/2001	Ming-Der Lin	MR3003-8	7293
4586	7590	11/26/2003	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			GARRETT, DAWN L	
			ART UNIT	PAPER NUMBER

1774

DATE MAILED: 11/26/2003

①

Please find below and/or attached an Office communication concerning this application or proceeding.

CLO6

Office Action Summary

Application No.

09/993,682

Applicant(s)

LIN ET AL.

Examiner

Dawn Garrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-5 and 19-21 is/are allowed.
- 6) ☒ Claim(s) 1,6,8-12 and 14-18 is/are rejected.
- 7) ☒ Claim(s) 7 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2-19-2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. This Office action is in response to the amendment dated September 15, 2003, paper no. 5. Claims 1, 2, 5, 7-11, 13, 18, 19, and 21 were amended. Claims 1-21 are pending.
2. The objections set forth in paper no. 4 (mailed June 20, 2003), paragraphs 1-3 are withdrawn due to the amendment.
3. The rejection of claim 13 under 35 USC 103(a) as being unpatentable over Hatwar (US 2003/0068524) in view of Fukuoka (US 2002/0168544) is withdrawn.
4. The rejection of claims 1, 8, 10, 12, 14, 15, 17, and 18 under 35 USC 102(e) as being anticipated by Hatwar (US 2003/0068524) set forth in paper no. 4, paragraph 6 is maintained.
5. The rejection of claim 6 under 35 USC 103(a) as being unpatentable over Hatwar (US 2003/0068524) set forth in paper no. 4, par. 8, is maintained.
6. The rejection of claim 9 under 35 USC 103(a) as being unpatentable over Hatwar (US 2003/0068524) in view of Fukuoka (US 2002/0168544) is maintained.
7. The rejection of claim 11 under 35 USC 103(a) as being unpatentable over Hatwar (US 2003/0068524) in view of Howard et al. (US 2002/0021088) is maintained.
8. The rejection of claim 16 under 35 USC 103(a) as being unpatentable over Hatwar (US 2003/0068524) in view of Mishima (US 2001/0053462) is maintained.

Allowable Subject Matter

9. Claims 2-5 and 19-21 are allowed and claim 7 remains objected to as being dependent upon a rejected base claim for the reasons given in paper no. 4, par. 12. Claim 13 is also objected to as being dependent upon a rejected base claim. The closest prior art, Hatwar et al. discussed in the previous Office action, fails to teach or to render obvious the very specific luminescent layer materials of present claim 13.

Response to Arguments

10. Applicant's arguments filed September 15, 2003 have been fully considered but they are not persuasive. Applicant argues the following with regard to the amendment of independent claims 1 and 18:

"As each newly-amended independent Claim 1 and 18 also now more clearly recites, a 'blue' third light 'different in color from said second light is emitted by said luminescent layer when the device is applied with a bias voltage.' The full combination of these and other features now more clearly recited by Applicants' pending Claims are nowhere disclosed by the cited references. Note, for instance, that the primarily-cited Hatwar reference prescribes each of its colors to be emitted via a particular dopant. Hatwar prescribes its blue light in particular to be emitted by such a dopant rather than being 'emitted by said luminescent layer' itself, as each of Applicants' Claims 1 and 18 now more clearly recites."

The examiner respectfully submits that the Hatwar blue light-emitting layer clearly reads upon the luminescent layer required to emit blue light as recited in claims 1 and 18.

Applicant has not required that the luminescent host material emits blue light, but rather the luminescent layer emits blue light. Hatwar clearly states there is a doped, light emitting layer that in its entirety emits blue light (see abstract). Adjacent the Hatwar blue light emitting layer is an electron transport layer doped with a yellow emitting dopant (see abstract). The disclosure by Hatwar fulfills all the requirements of the present claims. The luminescent layer emits blue light and the electron transport layer

is doped with a yellow emitting compound (per the "second dopant"). The yellow color is different to the blue color of the luminescent layer. The rejections over Hatwar et al. and the further applied secondary references are respectfully maintained for the reasons of record.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (703) 305-0788. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached at (703) 308-0449. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.

CYNTHIA H. KELLY
SUPERVISOR PATENT EXAMINER
TECHNOLOGY CENTER 1700

D.G.

November 24, 2003

Cynthia H. Kelly